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Award Number: W81XWH-11-1-0154

TITLE: A Pilot Intervention to Increase Women's Coping Skills in Family Reintegration after Deployment in Combat Areas

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REPORT DATE: January 2013

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

1. REPORT DATE January 2013		2. REPORT TYPE Annual		3. DATES COVERED 1 January 2012-31 December 2012	
4. TITLE AND SUBTITLE A Pilot Intervention to Increase Women's Coping Skills in Family Reintegration after Deployment in Combat Areas				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER W81XWH-11-1-0154	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Patricia J. Kelly E-Mail: kellypi@umkc.edu				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) University of Missouri, Kansas City Kansas City, MO 64110				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The goal of this research is to create an intervention for the positive reintegration of women in the National Guard and Reserves into their civilian and family lives, which in turn will promote beneficial mental health outcomes for military families and our society. This mixed methods study will 1) Document specific challenges and facilitators involved in family reintegration for women and 2) Develop and pilot test a telephone-delivered coping/support intervention? To address aim 1, 42 qualitative interviews have been completed and initial analysis conducted which identified 8 discrete areas of stress. Pending is the distribution of a cross-sectional survey to address this aim—a specific challenge is the identification of an agreeable population.					
15. SUBJECT TERMS women, National Guard, family reintegration					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON USAMRMC
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (include area code)

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	4
Body.....	4
Key Research Accomplishments.....	11
Reportable Outcomes.....	11
Conclusion.....	11
References.....	NA
Appendices.....	NA

SECTION I (purpose/scope of research effort)

The goal of this research is to create an effective intervention that can contribute to the positive reintegration of women in the National Guard and Reserves into their civilian and family lives, which in turn will promote beneficial mental health outcomes for military families and our society. This mixed methods study will address two specific aims:

- 1) Document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment, and
- 2) Develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the *Resiliency Model of Family Stress*.

Four research questions will be examined:

1. How do women in the National Guard and Reserves who have been deployed in combat zones cope with issues of family reintegration?
2. What are the specific stressors encountered and coping strategies employed by this population during reintegration?
3. How does the *Resiliency Model of Family Stress* serve as a framework for the development of an economical and viable coping intervention to facilitate family relationships during reintegration?
4. How does participation in a telephone-delivered coping support intervention impact on family coping skills?

SECTION II (progress to date)

Phase 1—Qualitative Study

Institutional Review Board permissions to conduct the study were received from both the University of Missouri-Kansas City and the Department of Defense. Following these receipts, we secured permission to recruit participants via Face Book and website ads from National Guard units in the states of Kansas, Missouri, North Dakota, Nebraska and Iowa. We conducted semi-structured interviews, both in person and by telephone with 42 females from these units. An interview guide was used, based on the *Resiliency Model of Family Stress*. Interviews were transcribed and an in-depth analysis is currently being conducted using methods of consensual qualitative research methods.

The average age of participants was 35 years ($SD=9.7$) and the average length of deployment was 9.5 months ($SD=4$). Twenty-three percent of participants had been deployed twice, and most veterans were deployed to Iraq or Afghanistan. Forty-six percent were married, 28% were divorced, and the remainder reported being single, partnered, or separated. Seventy-four percent reported having children whose ages ranged from toddler to adult. These demographics are shown below in Table 1.

Table 1. Demographics of Phase 1 Participants N=43

States	Participants	Percentage
Missouri	10	23.3
Iowa	5	11.6
Kansas	5	11.6
North Dakota	5	11.6
Nebraska	1	2.3
Unknown	17	39.6

Age		
<20	2	4.7
20's	10	23.2
30's	5	11.6
40's	9	40.9
50>	1	2.3
Unknown	17	39.5
Deployments		
1	31	72.1
2	10	23.2
3	1	2.3
Unknown	0	
Spouse in Military		
Yes	21	48.8
No	10	23.2
Not Married	12	27.9
Number of Children		
0	15	34.9
1	5	11.6
2	8	18.6
3	4	9.3
4	3	7.0
5	1	2.3
Unknown	7	16.3

Our preliminary analysis suggests that women's reintegration experiences are a function of eight areas:

- Partners
- Children
- Other family
- Friends
- Relationship with the National Guard
- Personal characteristics
- Use of resources
- Deployment experiences

Table 2 presents the coding topics that make up the current organization of our qualitative analysis. The analysis plan will code all of the interviews into one of the below categories. Themes will then be elicited from the categories. An audit trail will be maintained to assure reliability.

Table 2: Preliminary Organization of Topics in Phase 1 Qualitative Analysis

Topic	Categories
Demographic information & deployment contextual/facts	Demographics Interviewee's Deployment Traditional support system

Emotional experiences	Positive emotions Negative emotions
Contextual stressors	Living conditions --Contextual --Living conditions Gendered experiences Faith/religion Relational --Partner --Child --Family of origin --Friends --Physical (e.g., injury) Other transitional stressors
Coping with reintegration	Help seeking behaviors Types of resources used Experiences of using these resources Other coping strategies
Role	Spiritual Military As partner As mother --Family of origin --Single parent
Other deployment-related experiences	Living conditions Gendered experiences Faith/religion Career (including employment and education) Relational --Partner --Child --Family of origin --Friends
Recommendations & Reflections	
Other (does not clearly fit any other themes or topic areas)	

Our dissemination efforts at professional conference venues have begun. Four presentations are currently planned:

- For God and Country: The Role Of Religion and Spirituality in the Lives of Women National Guard Soldiers before, during and after Deployment--this abstract was submitted for oral presentation at the Annual Mid-Year Research Conference on Religion and Spirituality, Loyola University, Columbia, MD.

- The Unique Experience of Women Soldiers during and after Deployment--this abstract was submitted for a poster presentation at the American Psychological Association Annual Conference, Honolulu, HI.
- Honey, I'm Home! Women Soldiers' Stories of Family Re-integration after Deployment—this abstract was submitted for a second poster presentation at the American Psychological Association Annual Conference, Honolulu, HI.
- Family Reintegration Issues of Women Deployed in Combat Zones—this abstract was submitted for an oral presentation at the International Family Nursing Conference, Minneapolis, MN.

Phase 2-Quantitative Study

While research activities focused on the implementation and analysis of Phase 1 data, we have also initiated development of the Phase 2 survey. Survey items will be finalized based on the analysis of Phase 1 data. Based on the preliminary analysis, survey items have been developed and available for pilot study, which is currently occurring with local sample. The survey available at: [Reintegration 1](#). Table 3 contains is the summary of our current thinking about the Phase 2 research questions, populations, analysis, and predictor and outcome variables.

Table 3: Phase 2 Survey Summary

Research Question	Population/Basic analysis	Predictor variables	Outcome variables
#1: What is the effect of deployment on women in the National Guard and Reserves?	Two group comparison: women who have and have not been deployed	Demographics Pre-deployment life events Religiosity Coping	PTSD assessment Stress Growth Scale Depression Post-Deployment Life Events
#2: What is the effect of deployment on the families of women in the National Guard and Reserves?	Two group comparison of women who have and have not been deployed	Demographics Pre-deployment life events Religiosity	Family Apgar Family Hardiness Parenting strain
#3: What factors influence individual and family reintegration experience?	Regression analysis of women who have been deployed	Demographics Pre-deployment life events (abbreviated) Relationships within unit Post-deployment support Religiosity Coping Self-assessment of deployment [will not use in model]	Family Apgar Family Hardiness Stress Growth Scale PTSD Assessment Depression

Hypothesis (based on model developed from qualitative interviews and on literature review):
 Women's post-deployment individual and family functioning is a function of:

- Prior experiences
- Deployment experiences
- Personal coping strategies
- Family functioning

Summary of Variables

Variable	Predictor	Outcome	# Items	Page	Citation
Demographics	X		11	3	
Family Apgar		X	5	4	
Family Hardiness		X	20	4	McCubbin, H. & McCubbin
Parenting strain		X	7	5	Adapted from: Pierce, P., Vinokur, A. & Buck, C. (1998). Effects of war-induced maternal separation on children's adjustment during the Gulf War and two years later. Journal of Applied Psychology, 28, 14: 1286-1311.
Religiosity	X		5	6	Koenig, H., Meador, K. & Parkerson, G. (1997). Religion index for psychiatric research: A 5-item measure for use in health outcome studies. American Journal of Psychiatry, 154: 885-886.
Coping	X		14	7	Adapted from DHHS Publication No. PHS79-50097
Depression		X	12	8	Major Depression Inventory; available at: www.ccmh.dk
Pre-deployment life events (abbreviated)	X		2	8	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Post-traumatic growth Inventory		X	10	9	Cann, A., et al., (2010). Anxiety, Stress & Coping, 23, 2: 127-137.
PTSD Assessment		X	17	10	Weathers, F., Litz, B., Huska, J., & Keant, T. (1994). The PTSD checklist-civilian version (PCL-C). Boston, MA: National Center for PTSD.
Service rewards/challenges			2	12	Developed for this survey
TOTAL FOR ALL			105		
Additional Items for Deployed Participants					
Deployment specifics	X		16	12	
Relationships within unit (Q 1-7 general; 8-14	X		16	16	Deployment Risk and Resilience Inventory (DRRI), National Center for

sexual)					PTSD, 2009
Post-deployment support	X		15	17	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Post-deployment life events		X	7	16	Deployment Risk and Resilience Inventory (DRRI), National Center for PTSD, 2009
Additional items for deployed			54		

Additional work on Phase 2 of the funded research has involved efforts to secure access to a population of women in the National Guard or Reserves in order to have a coherent sample for the quantitative survey. Because the Phase 1 survey was conducted with National Guard units and because considerably less work has been done with this population compared to that of women in the Army or Navy Reserves, our focus has been on state National Guard units. Email and phone contacts with National Guard units that have a large female enrollment have been initiated and followed-up. Suggestions from colleagues and from the Office of Congressionally-Directed Medical Research have also been followed-up.

SECTION III—Current/Anticipated Problems

The current most difficult problem is in securing access to an appropriate research population for the quantitative Phase 2 study. The original plan from the funding proposal was to send an electronic link to a population of women in the National Guard or Reserves, in order to access a sample of 1,000 participants for an electronic survey administration. We can modify this strategy to include on-site data collection during National Guard meetings or trainings. However, because state National Guard units operate independently, we have been unsuccessful in securing access to any population. Our current plan is to continue to follow-up all leads, with the hope of a Summer 2013 data collection. If unsuccessful at this time deadline, we will work to secure access to a population of women from Army or Navy Reserve units

SECTION IV (work during next reporting period)

During the upcoming year, we will complete the Phase 1 qualitative analysis and initiate our publication dissemination efforts. Three publications are currently planned: Family Reintegration Issues for Women in the National Guard; Gendered Experiences of Women's Deployment; and Spirituality as a Coping Strategy for Women in the National Guard.

We will also be working to implement alternative plans to secure access to a coherent population of women in the Guard or Reserves and gather an appropriate sample and adequate sample size. This will be done with the following parallel processes:

Continue/Expand Plan A	Initiate Plan B
Follow-up phone calls and emails to Texas and to Georgia National Guard units (2/3 states with the largest number of women in NG unit) for electronic administration of survey	Initiate contact with Midwest states with lower number of women in NG unit for on-site administration at Summer training sessions
Initiate contact with Pennsylvania, Minnesota and Louisiana National Guard units (other states with high number of women in NG unit) for electronic administration of survey	

As soon as permission to access a population is secured, Institutional Review Board applications will be initiated and data collection begun as soon as approvals are received. Following data collection, data analysis will be done and preliminary findings made available. The dissemination plan for Phase 2 data will occur and planning for the Phase 3 pilot intervention begun.